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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KANE, CORDELIA P

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/789,292	Applicant(s) BRENTON ET AL.	
	Examiner CORDELIA KANE	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,8-22 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,8-22 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 16, 2009 have been fully considered but they are not persuasive. Applicant argues that Staples fails to teach or suggest an in-band access path between the user computing device and the remote network element via a first network, firewall and router. However, Staples teaches a user computer device (element 130/112) communicating with a remote network element (element 110, 161A, 161B) via a first network (element 125), firewall (element 121) and router (Figures 4 and 6). It is clear from Figure 6, that the user is able to communicate not only with a telephony server (110) but also data servers (161A and 161B). The telephony server and data servers are remote network elements.
2. Applicant also argues that Staples fails to teach or suggest an out-of-band access path between the user computing device and the remote network element via a first network, firewall, first server, modem bank and PSTN. However, Staples teaches a user device (element 130) and remote network element (via a network (element 125), firewall (element 121, page 8, paragraph 111), first server (element 120), and PSTN (element 150) (Figure 3B). Staples fails to teach or suggest a modem bank. However, Smith teaches a modem bank that is connected to the public switched telephone network (page 2, paragraphs 15 and 16). Therefore in combination Staples in view of Smith teaches the out-of-band access as claimed.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1 – 4, 6, 10 - 14, 16 - 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staples et al's US Publication 2002/0118671 A1, and further in view of Smith et al's US Publication 2003/0018916 A1.
5. Referring to claim 1, Staples discloses:
 - a. A first network configured to enable a user computing device to access remote network elements (Figure 3a-Figure 6, page 10, paragraph 133).
 - b. A firewall in communication with said first network and configured to restrict access to said first network and the user computing device (Figures 3a and 4, page 8, paragraph 111).
 - c. A router in communication with said firewall and a remote network element, an in-band access path defined by a communication path between the user, and remote network element via said first network, firewall and router (Figures 4 and 6, page 12, paragraph 157).
 - d. A first server in communication with said firewall (Figure 4).
 - e. An out of band access path defined by a communication path between the user, and remote network element via said first network, firewall (page 8, paragraph 111), first server and PSTN (Figure 3B).
 - f. The first server configured to:

- i. Receive a request to communicate with one or more remote network elements over the out of band access path (page 10, paragraph 139).
- ii. Authenticate a user (page 8, paragraph 117).
- iii. Facilitate a session with a second server for establishing a connection with an external network element (page 10, paragraph 139).
- iv. Establish a secure path over the out of band access path between the user computing device and the one or more remote network elements (Figure 6, page 6, paragraph 73).
- v. Transmit data for communication operational status of the one or more remote network elements between the one or more network elements and the user computing device over the secure pathway (page 10, paragraphs 138-140).

6. Staples does not explicitly disclose a modem bank connected to a plurality of modems operable to authenticate the request and communicate. However, Smith discloses a modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16). Staples and Smith are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The suggestion/motivation for doing so

Art Unit: 2432

would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).

7. Referring to claim 2, Staples teaches the second server operable to select a specific modem (page 10, paragraph 139).

8. Referring to claim 3, Smith teaches that the first server is able to log invalid login attempts (pages 2-3, paragraph 24).

9. Referring to claim 4, Staples teaches that the first server is capable of allowing specific access to privileged users (page 9, paragraphs 116-117).

10. Referring to claim 6, Staples teaches:

g. Communicating between a user computing device and a network element via an in-band access path, the in-band access path including a firewall and a router (Figures 4 and 6, page 12, paragraph 157).

h. Communicating between the user computing device and the network elements via an out-of-band access path, the out of band access path including the firewall, a first server and a public switched telephone network (Figure 3B).

i. Requesting access, from the user computing device, out-of-band access to the network element (page 10, paragraph 139) via a remote modem in communication with the network element (Figure 5).

j. Communicating from the network device via out-of-band access path with the remote modem (Figures 3a-6).

k. Authenticating, by the first server, a request to access the remote modem (page 8, paragraph 117).

- I. Establishing, by the first server, a secure pathway over the out-of-band access path between the user computing device and the network element (Figure 6, page 6, paragraph 73).
 - m. Transmitting data for communicating operational status of the network element between the network element and the user computing device over the secure pathway (page 10, paragraphs 138-140).
- 11. Staples does not explicitly disclose a modem bank connected to a plurality of modems. However, Smith discloses a modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16). Staples and Smith are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The suggestion/motivation for doing so would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).
- 12. Referring to claim 10, Staples teaches encrypting the communicated data to secure network communications (page 34, paragraph 413).
- 13. Referring to claim 11, Staples teaches:
 - n. Receiving a first request via an out-of-band process to establish a connection with a network element (page 10, paragraph 139).
 - o. Receiving a security identifier to authenticate the request (page 8, paragraph 117).

Art Unit: 2432

- p. Identifying a dial up number for accessing the remote modem (page 10, paragraphs 138-139).
 - q. Directing a server to select a specific modem to provide feedback related to said network device (page 10, paragraph 139).
 - r. Authenticating a second request (page 8, paragraph 117).
 - s. Authenticating a third request to access the network element (page 8, paragraph 117).
 - t. Transmitting data for communicating the operational status of the network element between the network element and a user computing device over a secure pathway established between the user computing device and the network element (page 10, paragraphs 138-140).
14. Staples does not explicitly disclose a modem bank connected to a plurality of modems, or capturing information associated with said first request to a log file.

However, Smith discloses:

- u. A modem bank connected to a plurality of modems that authenticates and provides a connection to remote elements (page 2, paragraph 16).
 - v. Capturing information associated with said first request to a log file (pages 2-3, paragraph 24).
15. Staples and Smith are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples and Smith before him or her, to modify the system of Staples to include the modem bank of Smith. The

Art Unit: 2432

suggestion/motivation for doing so would have been that traditional phone connections incur significant costs on each side of the carrier (page 2, paragraph 16).

16. Referring to claim 12, Staples teaches establishing a communications pathway by exchanging packets of information using one or more protocols (page 16, paragraph 197)

17. Referring to claim 13, Smith teaches issuing a command to the network device to authenticate access to the network device (page 2, paragraph 23).

18. Referring to claim 14, Staples teaches that the identifier is a security credential component (page 8, paragraphs 116-117).

19. Referring to claim 16, Smith teaches capturing session information (pages 2-3, paragraph 24).

20. Referring to claim 17, Smith teaches logging logon successes and failures (pages 2-3, paragraph 24).

21. Referring to claim 18, Smith teaches logging a timestamp (pages 2-3, paragraph 24).

22. Referring to claim 19, Staples teaches:

w. Sending a request to establish a connection with a remote modem (page 10, paragraph 139).

x. Selecting a modem (page 10, paragraph 139).

y. Receiving a response from said server to establish a link (pages 10-11, paragraph 140).

Art Unit: 2432

- z. Dialing a telephone number to said pooled modem to establish a link (page 10, paragraph 138).
23. Referring to claim 20, Staples teaches:
- aa. Receiving login identification information (page 8, paragraph 116).
 - bb. Verifying the login information against a list of authorized users (page 8, paragraph 116).
 - cc. Notifying the user with a status response (page 8, paragraph 140).
24. Referring to claim 21, Staples teaches that the user information is a username and password (page 8, paragraph 116).
25. Referring to claim 22, Staples teaches that the status response is an approval or denial to access said remote modem (page 10, paragraph 140).
26. Referring to claim 25, Staples teaches that the second server is in communication with said first server, and configured to select a modem over which to communicate information communicated between the user computing device and the remote network elements (Figure 6, page 10, paragraph 139).
27. Claims 8, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staples in view of Smith, as applied above and further in view of Xu et al's US Patent 6,151,628.
28. Referring to claim 8, Staples in view of Smith teaches the limitations of the parent claims. Staples in view of Smith fails to teach validating the number dialed to establish that the requesting modem is authorized to connect. However, Xu discloses determining

Art Unit: 2432

if the user is allowed to connect due to the user phone number not matching with the database (column 12, lines 26-31). Staples in view of Smith and Xu are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples in view of Smith and Xu before him or her, to modify the system of Staples in view of Smith to include the number authentication of Xu. The suggestion/motivation for doing so would have been to be sure the accessing user is authorized (column 12, lines 26-29).

29. Referring to claim 9, Staples teaches using credentials for authentication (page 8, paragraph 117).

30. Referring to claim 15, Staples teaches

dd. Issuing a request from the user (page 10, paragraph 138).

ee. Receiving a telephone number for dialing (page 10, paragraph 139)

31. Staples in view of Smith fails to teaches validating the telephone number against a predetermined list. However, Xu discloses determining if the user is allowed to connect due to the user phone number not matching with the database (column 12, lines 26-31). Staples in view of Smith and Xu are analogous art because they are from the same field of endeavor, networks. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Staples in view of Smith and Xu before him or her, to modify the system of Staples in view of Smith to include the number authentication of Xu. The suggestion/motivation for doing so would have been to be sure the accessing user is authorized (column 12, lines 26-29).

Conclusion

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is (571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2432

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K./
Examiner, Art Unit 2432

/Benjamin E Lanier/
Primary Examiner, Art Unit 2432